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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/520,498	AHN ET AL.	
	Examiner	Art Unit	
	TAE K. KIM	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) *8,18 and 20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7, 9-17, 19, 21, and 22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is in response to the Applicant's Request for Continued Examination (RCE) filed on June 2, 2008. Applicant has added new Claim 22. Claims 1 - 7, 9 - 17, 19, 21, and 22, where Claims 1, 5, 17, and 19 are in independent form, are presented for examination.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 2, 2008 has been entered.

Response to Arguments

Applicant's arguments with respect to Claims 1 - 4, 17, 19, and 21 have been considered but are moot in view of the new ground(s) of rejection necessitated by Applicant amendments.

Applicant's arguments with respect to Claims 5 – 7 and 9 – 16 have been fully considered but they are not persuasive. Applicant argued:

a) Nagaoka does not disclose that the remote access service unit includes a profile database.

b) Nagaoka does not disclose that the performance of the remote access terminal includes screen size.

c) Nagaoka does not disclose that the profile database includes the services available from the provider.

d) Neither Nagaoka nor Baba discloses that the user profile database includes a list of devices preferred by the user and a list of requested events.

Examiner respectfully disagrees with applicant's assertions.

1. With regards to a), Nagaoka discloses the use of a profile database for the remote access service unit [Fig. 6; Para. 0051; customer management database used to show a user ID associated with a home network, remote terminal, and security level].

2. With regards to b), Nagaoka discloses that the database includes screen size of the remote access terminal [Fig. 6 and 8; Para. 0133, 0135; the data is generated and transmitted to the terminal based on the size of the picture that can be displayed on the remote terminal].

3. With regards to c), Nagaoka discloses that the database includes the services available from the provider [Fig. 3 and 6, 14A-14N, 15A-15L; the status information table corresponds to each home-located electronic device that is available and the services that can be performed; it is inherent that the table corresponds to profile database used for the home network since each profile can be associated with a different home network and different devices].

4. With regards to d), Nagaoka discloses that the profile database includes a list of requested events [Para. 0195; billing is made on the basis of data

corresponding to the remote control each time when the request is performed]. Nagaoka also discloses that the profile database includes a list of devices preferred by the user [Fig. 6 and 14A-14N; Para. 0182; the user can set his security setting to configure what devices are displayed on the user terminal to show only the devices the users prefers].

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 – 4, 17, 19, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Appl. 2002/0180579 A1, filed by Tatsuji Nagaoka et al. (hereinafter "Nagaoka"), In view of U.S. Patent 6,058,426, invented by Debbie A. Godwin et al (hereinafter "Godwin").

Regarding Claims 1 and 2, Nagaoka discloses a remote control system of a home network [Fig. 1; Abstract], comprising:

a device control processing unit [Figs. 1 and 2; Pgs. 5-6, Para. 0099, 0100, 0103; home server comprises of a control unit which communicates with the home network management facility and the home-located devices] for:

including a home network view a list of a plurality of controlled devices [Fig. 3; Pg. 6, Para. 0108; display shows each home-located device or security system], state of each device [Fig. 3; Pg. 6, Para. 0108; status information shows the latest status of the home-located devices], a list of subscribed events [Fig. 3; Pg. 6, Para. 0110; display of home-based devices shows the programming history of the recording requests made

on particular devices that have such a feature, in this instance a VCR], and a list of service requests [Fig. 3; Pg. 6, Para. 0110; display of home-based devices shows the programming requests made on particular devices that have the ability to preprogram certain functions, in this instance a VCR];

processing a possible service request [Pg. 5, Para. 0091, 0093, 0095; home network management facility receives a control instruction from remote user terminal, then transmits the received control instruction to the home server via packet communication network];

changing a service request from a remote access service unit into at least one UPnP (universal plug and play) message or changing a message from a UPnP device into a notification [Pg. 5, Para. 0091, 0093, 0095; home server communicates with the home-located electronic devices via UPnP]; and

transmitting the at least one UPnP message or the notification request to the remote access service unit [Pg. 5, Para. 0091, 0093, 0095; home network management facility receives a control instruction from remote user terminal, then transmits the received control instruction to the home server via packet communication network; home server communicates with the home-located electronic devices via UPnP].

Nagaoka, however, does not specifically disclose that the service requests from the remote access service unit are stored in an order received and

processed in a service request queue and a service request being processed has been saved in a service request table.

Godwin discloses of a system and method for managing resources in an information handling system [Abstract] where the service requests from the remote access service unit are stored in an order received and processed in a service request queue [Fig. 5, items 502, 510, 512, 514, 522; Col. 9, Lines 20-31; as the task manager receives each service request, the service request along with the status is put into the service queue for processing] and a service request being processed has been saved in a service request table [Fig. 5, item 514; Col. 9, Lines 31-37; service request queue is a data table that contains information regarding the requests which can be queried by users and are also put in an audit log].

It would have been obvious to one skilled in the art at the time of the invention to implement a service request queue and table within the home network management facility server of Nagaoka since UPnP is a distributed, open architecture that allows peer-to-peer networking of networked applications and wireless devices based on established standards such as TCP/IP, UDP, HTTP, and XML. The home network management facility in Nagaoka performs remote control of the devices within the home network and bills the client and, therefore, already implements tables listing the service requests made by the user that were processed. Furthermore, transmitting UPnP requests from the home netowrk management facility to the home server can be done via TCP/IP.

The motivation for one skilled in the art at the time of the invention to combine the teachings of Nagaoka and Godwin is to utilize a service request queue and a service request table to efficiently manage and allocate resources in an information handling system [Col. 2, Lines 47-51]. Additionally, users can request and obtain access to all needed resources in one place [Col. 2, Lines 47-51]. This allows the designer of a home network management facility to better utilize the resources of the home network where some may lack the functionality for presetting scheduled services (ex: lights, ovens, air conditioning thermostats) with the resources that do have that functionality (ex: VCRs).

6 Regarding Claim 3, Nagaoka, in view of Godwin, discloses all the limitations of Claim 1 above. Nagaoka, further discloses that the device control processing unit has a database for each remote terminal that has access to the home network [Pg. 5, Para. 0085, 0086; Pg. 7, Para. 0133; terminal information database holds information regarding the remote unit's communication capabilities]. However, Nagaoka or Godwin does not specifically disclose that the device control processing unit includes one local CP for each remote terminal.

It was well known to one skilled in the art at the time the invention that each remote terminal can be associated with a unique control point accessing the various devices within the home network. It would have been obvious that the user and terminal information, security level, and preferences that are stored within the system can be used to allow a specific configuration that can limit the types of devices that the user has access to. These configurations can either be

done logically within one CP or physically with one CP associated with each remote terminal within the system. These individually associated CP's will prevent the access of more harmful devices by specific users; for example, children will not have access to the home security system or the kitchen appliances.

7 Regarding Claim 4, Nagaoka, in view of Godwin, discloses all the limitations of Claim 1 above. Nagaoka further discloses that the device control processing unit has a database for each remote terminal that has access to the home network [Pg. 5, Para. 0085, 0086; Pg. 7, Para. 0133; terminal information database holds information regarding the remote unit's communication capabilities]. However, Nagaoka or Godwin does not specifically disclose that the device control processing unit includes one local CP for each device kind.

It was well know to one skilled in the art at the time the application was filed that each device kind can be associated with a unique CP within the home network. The Nagaoka system has database that stores access information associated with each user. It would have been obvious to one skilled in the art to also create a database storing information associated with each device that is connected to the home network. Furthermore, these devices can be grouped logically within the database or physically by having one local CP connected to one particular device type. For example, a CP will need different drivers and communication ports to control televisions versus a refrigerator. Having a different CP controlling those devices will allow the user to access or perform more specified functions available for each device type since the associated CP

can be customized to the functions available within those devices less the specifications that are not needed to control the other devices.

8 Regarding Claim 17, Nagaoka discloses a remote control system of a home network [Fig. 1; Abstract], comprising of a device control processing unit operating as a CP (control point) [Figs. 1 and 2; Pgs. 5-6, Para. 0099, 0100, 0103; home server comprises of a control unit which communicates with the home network management facility and the home-located devices] for mutual operation with a plurality of devices and controlling the plurality of devices according to a service request from a remote terminal [Pg. 5, Para. 0091, 0093, 0095; home network management facility receives a control instruction from remote user terminal, then transmits the received control instruction to the home server via packet communication network; home server communicates with the home-located electronic devices via UPnP], a remote access service unit for notifying the device control processing unit of the service request from the remote terminal [Fig. 1; home network management facility manages communications between the home network and the remote access device], a remote terminal service unit for transmitting the service request to the remote access service unit and transmitting a response from the remote access service unit to a pertinent terminal [Fig. 1], a setup module for initializing the device control processing unit [Pg. 8, Para. 0152-0154, 0156; packet registration and registration process to initiate communication with the remote unit where the terminal ID of the remote unit is transmitted to the home network management facility, which determines the remote unit's capabilities and transmits the log-in

screen based on those capabilities] and a profile database of the remote access service unit [Pg. 8, Para. 0152-0154, 0156; packet registration and registration process to initiate communication with the remote unit where the terminal ID of the remote unit is transmitted to the home network management facility, which determines the remote unit's capabilities and transmits the log-in screen based on those capabilities], and a communication module for providing asynchronous notification functions comprising e-mail, voice telephone, and SMS (short message service) [Fig. 20A; Para. 0016, 0096; electronic messages that can be both displayed via e-mail and SMS and the ability to use voice].

Nagaoka, however, does not specifically disclose that the service requests from the remote access service unit are stored in an order received and processed in a service request queue and a service request being processed has been saved in a service request table.

Godwin discloses of a system and method for managing resources in an information handling system [Abstract] where the service requests from the remote access service unit are stored in an order received and processed in a service request queue [Fig. 5, items 502, 510, 512, 514, 522; Col. 9, Lines 20-31; as the task manager receives each service request, the service request along with the status is put into the service queue for processing] and a service request being processed has been saved in a service request table [Fig. 5, item 514; Col. 9, Lines 31-37; service request queue is a data table that contains information regarding the requests which can be queried by users and are also put in an audit log].

It would have been obvious to one skilled in the art at the time of the invention to implement a service request queue and table within the home network management facility server of Nagaoka since UPnP is a distributed, open architecture that allows peer-to-peer networking of networked applications and wireless devices based on established standards such as TCP/IP, UDP, HTTP, and XML. The home network management facility in Nagaoka performs remote control of the devices within the home network and bills the client and, therefore, already implements tables listing the service requests made by the user that were processed. Furthermore, transmitting UPnP requests from the home network management facility to the home server can be done via TCP/IP.

The motivation for one skilled in the art at the time of the invention to combine the teachings of Nagaoka and Godwin is to utilize a service request queue and a service request table to efficiently manage and allocate resources in an information handling system [Col. 2, Lines 47-51]. Additionally, users can request and obtain access to all needed resources in one place [Col. 2, Lines 47-51]. This allows the designer of a home network management facility to better utilize the resources of the home network where some may lack the functionality for presetting scheduled services (ex: lights, ovens, air conditioning thermostats) with the resources that do have that functionality (ex: VCRs).

9 Regarding Claim 19, Nagaoka discloses a remote control system of a home network [Fig. 1; Abstract], comprising of a local home network in which plural devices are connected [Fig. 1], a remote terminal for remotely controlling the local home network from a remote place [Pg. 5, Para. 0091, 0093, 0095;

home network management facility receives a control instruction from remote user terminal, then transmits the received control instruction to the home server via packet communication network; home server communicates with the home-located electronic devices via UPnP], and a remote access server which functions as a local CP (control point) and transmits a service request to the remote terminal, or receives an answer from the remote terminal [Figs. 1 and 2; Pgs. 5-6, Para. 0099, 0100, 0103; home server comprises of a control unit which communicates with the home network management facility and the home-located devices], wherein the remote access server is included in the local home network or an Internet provider server [Figs. 1 and 2; Para 0099-0103; the home network control server is connected to the home communication bus].

Nagaoka, however, does not specifically disclose that the service requests from the remote access service unit are stored in an order received and processed in a service request queue and a service request being processed has been saved in a service request table.

Godwin discloses of a system and method for managing resources in an information handling system [Abstract] where the service requests from the remote access service unit are stored in an order received and processed in a service request queue [Fig. 5, items 502, 510, 512, 514, 522; Col. 9, Lines 20-31; as the task manager receives each service request, the service request along with the status is put into the service queue for processing] and a service request being processed has been saved in a service request table [Fig. 5, item 514; Col. 9, Lines 31-37; service request queue is a data table that contains information

regarding the requests which can be queried by users and are also put in an audit log].

It would have been obvious to one skilled in the art at the time of the invention to implement a service request queue and table within the home network management facility server of Nagaoka since UPnP is a distributed, open architecture that allows peer-to-peer networking of networked applications and wireless devices based on established standards such as TCP/IP, UDP, HTTP, and XML. The home network management facility in Nagaoka performs remote control of the devices within the home network and bills the client and, therefore, already implements tables listing the service requests made by the user that were processed. Furthermore, transmitting UPnP requests from the home network management facility to the home server can be done via TCP/IP.

The motivation for one skilled in the art at the time of the invention to combine the teachings of Nagaoka and Godwin is to utilize a service request queue and a service request table to efficiently manage and allocate resources in an information handling system [Col. 2, Lines 47-51]. Additionally, users can request and obtain access to all needed resources in one place [Col. 2, Lines 47-51]. This allows the designer of a home network management facility to better utilize the resources of the home network where some may lack the functionality for presetting scheduled services (ex: lights, ovens, air conditioning thermostats) with the resources that do have that functionality (ex: VCRs).

10. Regarding Claim 21, Nagaoka, in view of Godwin, discloses all the limitations of Claim 19 above. Nagaoka further discloses that the remote access

server acquires state information of a plurality of devices connected to the local home network with reference to a device list to be controlled [Fig. 3; Pg. 6, Para. 0108; display shows each home-located device or security system], a list of subscribed events and a service request list [Fig. 3; Pg. 6, Para. 0110; display of home-based devices shows the programming requests made on particular devices that have the ability to preprogram certain functions, in this instance a VCR], and controls the plurality of devices by processing request/response with the remote terminal [Pg. 5, Para. 0091, 0093, 0095; home network management facility receives a control instruction from remote user terminal, then transmits the received control instruction to the home server via packet communication network; home server communicates with the home-located electronic devices via UPnP].

11. Regarding Claim 22, Nagaoka, in view of Godwin, discloses all the limitations of Claim 19 above. Godwin further discloses that processing the possible service request comprises of determining whether the service request queue is empty [Fig. 6, item 604].

Claims 5 – 7 and 9 – 16 are rejected under 35 U.S.C, 103(a) as being unpatentable over Nagaoka, in view of U.S. Patent 5,758,057, invented by Hiroshi Baba et al. (hereinafter "Baba").

12. Regarding Claim 5, Nagaoka discloses a remote control system of a home network [Fig. 1; Abstract], comprising of a remote access service unit for receiving a user's web request from a remote terminal service unit [Figs. 1 and 2; Pgs. 5-6, Para. 0099, 0100, 0103; home server comprises of a control unit which

communicates with the home network management facility and the home-located devices], transmitting the web request to a device control processing unit by converting the web request into a service request according to contents of the web request [Pg. 5, Para. 0091, 0093, 0095; home network management facility receives a control instruction from remote user terminal, then transmits the received control instruction to the home server via packet communication network; home server communicates with the home-located electronic devices via UPnP], and transmitting a web response for a pertinent remote terminal to the remote terminal service unit by having a service view comprising at least one web document [Para. 0086; remote terminal communicates control instructions to the remote terminal service unit via a web browser], wherein the remote access service unit includes a profile database [Fig. 6; Para. 0051, 0186, 0195; once the instructions are complete, the network management server receives the control complete information and transfers that info to the HTTP server; then web data is sent to the user terminal displaying that the request was completed and the status of the home-located device after completion of the request] comprising of a list of devices preferred by the user [Fig. 6 and 14A-14N; Para. 0126, 0182; the user can set his security setting to configure what devices are displayed on the user terminal to show only the devices the users prefers], a list of requested events [Para. 0195; billing is made on the basis of data corresponding to the remote control each time when the request is performed], performance of the remote access terminal including a screen size and a type of an input device [Fig. 8; Para. 0133, 0135; remote access terminal performance information

correlates to terminal ID is user profile including the size of the picture that can be displayed on the remote terminal] and network provider's network bandwidth and services available from the provider [Fig. 3 and 6, 14A-14N, 15A-15L; the status information table corresponds to each home-located electronic device that is available and the services that can be performed; it is inherent that the table corresponds to profile database used for the home network since each profile can be associated with a different home network and different devices; Para. 0012-0016, 0085; communication capacity of a remote terminal is determined by the maximum amount of data in a single reception; the types of services depend on the type of network, continuously or intermittently connected]. Nagaoka does not disclose that the profile database comprising of user access priority for each device.

Baba discloses the use of establishing priority levels for multiple users that determine priority of access to each device in a system with multiple devices [Fig. 1; Col. 8, Lines 31-42]. It would have been obvious to one skilled in the art at the time of the invention to establish user priority for accessing system devices where multiple users have access to allow higher priority users to access a particular device ahead of lower priority users when that device is accessed simultaneously by multiple users [Col. 8, Lines 31-42]. Access priority to each device can be associated with the security level for each user already incorporated in Nagaoka. Doing so will essentially eliminate waiting periods for higher priority users to access particular devices when there is high user traffic within the home network.

13. Regarding Claim 6, Nagaoka, in view of Baba, discloses all the limitations of Claim 5 above. Nagaoka further discloses that the service view comprises at least one web document connected to each other, and the web document includes a home network device state and control page, a device list page, and a user option page [Figs. 14.A-14N, 15A-15L; Pgs. 10-11, Para. 0177-0195; web pages are displayed based on user input, including a list of devices controlled, the state of the devices, and user option feature to change the status of or control the devices].

14. Regarding Claim 7, Nagaoka, in view of Baba, discloses all the limitations of Claim 5 above. Nagaoka further discloses that the remote access service unit determines the service view of a remote access service according to service-related information recorded in the profile database [Pg. 7, Para. 0120-127; security levels associated with each user determines the types of devices the user has access to], and provides various remote access services to the user and the remote terminal referring to the service view [Fig. 6; Pgs. 6-7, Para. 0118-0128; security level of each user determines the type of devices they have remote access to and the services available to the user will be affected and shown on the user terminal].

15. Regarding Claims 9 and 10, Nagaoka, in view of Baba, discloses all the limitations of Claim 5 above. Baba further discloses that the remote access service unit includes a mechanism for solving home network collision, in case multiple remote terminals simultaneously access the remote access service unit, to solve the home network collision at a home network level, a device level, an

operation level, or a mixed level comprising the device level and the operation level [Fig. 1; Col. 8, Lines 31-42; See rejection to Claim 5 above].

16. Regarding Claim 11, Nagaoka, in view of Baba, discloses all the limitations of Claim 9 above. Nagaoka further discloses that the remote access service unit includes a profile database [Fig. 6; Pgs. 6-7, Para. 0118; customer management database], determines a service view of a remote access service according to service related information recorded in a profile database [Pg. 7, Para. 0120-127; security levels associated with each user determines the types of devices the user has access to]), and provides various remote access services to a user and a remote terminal with reference to the service view [Fig. 6; Pgs. 6-7, Para. 0118-0128; security level of each user determines the type of devices they have remote access to and the services available to the user will be affected and shown on the user terminal].

It would have been known to one skilled in the art at the time of the invention to have a device access database which included a device access priority table to store the method disclosed in Baba. It would have been obvious to extend the user profile database in Nagaoka to include a device access database that already contained access levels per user which are associated with the types of devices a user had access to. This would to accurately record the transactions of each user within the system and the devices that are being used. Doing so would allow the system provider to accurately bill each user for using the system. Furthermore, it would allow the system provider to determine the usage habits of each user.

17. Regarding Claim 12, Nagaoka, in view of Baba, discloses all the limitations of Claim 11 above. Baba further discloses that a user's access priority is recorded for all devices in the home network, wherein a first user with a higher priority rank has priority over a second user with a lower priority rank when the first user and the second user collide at a device recorded in the table [Fig. 1; Col. 8, Lines 31-42; See rejection to Claim 5 above].

18. Regarding Claim 13, Nagaoka, in view of Baba, discloses all the limitations of Claim 11 above. Nagaoka or Baba do not further disclose of a device access database includes a share type table indicating accessibility to a device by other users while a specific operation of the device is being performed by the user.

It would have been well known to one skilled in the art at the time of the invention that the device access database can include a sharing type table by device's operations indicating access possibility from other users in performing a specific operation supported by the device. When a user requests to record something on a VCR, that operation would not be available if the recording time slot is already filled. Furthermore, while the VCR is recording, a user can access the device and request to record during an available timeslot without interfering with the current recording function. It would have been obvious that the home network management facility in Nagaoka can be further used to allow the various device operations to be available or busy depending on that operation to allow that operation to be performed in a device as long as it doesn't interfere with the current operations of the device. This allows the devices to process more than

one service request at a given time that do not cause harm to that device, the home, or other devices when performed together.

19. Regarding Claims 14 and 15, Nagaoka, in view of Baba, discloses all the limitations of Claim 11 above. Nagaoka or Baba do not further disclose that the device access database includes an access authority table, which lists access authority by priority ranks and user ranks for operations supported by each device.

It would have been well know to one skilled in the art at the time the application was filed that the device access database records an access authority table by priorities or users regarding operations supported by each device. The user access priority system disclosed by Baba allows service requests made into the home network to perform the highest priority user first if there is an access collision. Each user terminal is also associated with a security level per Nagaoka and the user information is stored within the user profile database. Since the priorities will determine which device will perform service request first and certain service requests are more important than others, it would be obvious to record the device access authority table by priorities. Additionally, each user has a specific security level associated with it that determines the types of devices the user has access to making it obvious to record the device access authority table by users. Recording the device access authority table by either users or priorities provides a means of verifying that only certain users have accessed particular devices or services within the home network and made the various setting changes or service requests for each device.

20. Regarding Claim 16, Nagaoka, in view of Baba, discloses all the limitations of Claim 11 above. Nagaoka further discloses that the remote terminal service unit is included for performing mutual communication as web request/response with the remote terminal via a built-in web server [Figs. 14.A-14N, 15A-15L; Pgs. 10-11, Para. 0177-0195; web pages are displayed based on user input, including a list of devices controlled, the state of the devices, and user option feature to change the status of or control the devices], transmitting the web request from the user to a remote access service unit, and transmitting the web response from the remote access service unit to the remote terminal [Pg. 5, Para. 0091, 0093, 0095; home network management facility receives a control instruction from remote user terminal, then transmits the received control instruction to the home server via packet communication network; home server communicates with the home-located electronic devices via UPnP], wherein the web response comprises a web document form ,generated referring to the recent service view [Fig. 6; Pgs. 6-7, Para. 0118-0128; security level of each user determines the type of devices they have remote access to and the services available to the user will be affected and shown on the user terminal].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 5,949,977 – method and apparatus for requesting and processing services with a common communication link with a service queue; U.S. Patent 5,987,021 – method and apparatus for allocating resources between queued and non-queued services.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae K. Kim, whose telephone number is (571) 270-1979. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton B. Burgess, can be reached on (571) 272-3949. The fax phone number for submitting all Official communications is (703) 872-9306. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the examiner at (571) 270-2979.

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